



The Green Assessment® Consultant's Scope of Work

Consultant Responsibilities

Green Assessment consultants' requirements include:

- Conduct an energy audit for the subject property based on the ASHRAE Level 1 standard, as amended per this description.
- Analyze energy and water consumption data and related equipment on-site with the goal of identifying energy and water conservation measures (EWCMS) for the property.
- Review the available utility bills and estimate consumption based on comparable building data appropriate for the subject building type, use and location.
- Provide the cost savings for each EWCMS. The total owner-paid energy and the total owner-paid water projected to be saved also must be expressed as percentages of the total existing consumption. The estimated labor and materials cost to implement each EWCMS must be provided.
- Perform a site visit to evaluate the building envelope, lighting, plumbing fixtures, HVAC system, appliances, current operations and maintenance.
- Enter the actual or estimated consumption into EPA's Portfolio Manager for an energy score. The EWCMS identified will be considered as opportunities to be further analyzed by the property owner.

A Green Assessment consultant must do the following:

Site Visit

- Inspect two units of each type in each distinct phase or each unique building construction type
- Inventory typical existing energy and water systems and equipment to understand equipment type/model, age, efficiency and condition
 - HVAC
 - Lighting
 - Domestic hot water
 - Kitchen appliances
 - Kitchen and bathroom plumbing fixtures
 - Laundry
 - Non-domestic water uses, such as irrigation and pools
- Evaluate the building envelope, including walls, windows and roof
- Interview knowledgeable staff to record current controls and operating systems

Assemble Building Data

- Assemble consumption bills for owner-paid utilities

- Assemble consumption bills for tenant-paid utilities for a minimum of 10% of the units if provided by the property owner
- Create a utility rate pricing schedule summary for electric (\$/kWh), gas (\$/therm), other purchased fuels and water (\$/gallon)

Analyze Energy and Water

- Conduct an end-use analysis to determine building energy and water inputs and outputs when whole building data is available, and analyze energy use by load
- Identify EWCMs
 - Electrical use reduction
 - Fuel use reduction
 - Water use reduction
 - Alternative energy sources (e.g., renewable energy, on-site generation)
 - Building envelope improvements
- Provide energy and water savings estimates using spreadsheet analysis, energy modeling software, or similar techniques
 - Indicate cost savings for each EWCM
 - Indicate percentage of consumption saved for each EWCM
 - Indicate EWCM savings as a percentage of total building consumption for use paid by the owner
- Provide estimated labor and material costs to implement all EWCMs
- Delineate owner and tenant savings as appropriate

Provide a written report including:

- Executive summary
- Facility description
- Description of EWCMs with estimated consumption savings, implementation costs and simple payback period

Benchmarking

- If the subject is master metered, utilize Energy Star Portfolio Manager to obtain an Energy Star® score.
- If the subject is individually metered and the borrower provides 10% of tenant utility bills, utilize Energy Star Portfolio Manager to obtain an Energy Star® score
- Create a building profile in Energy Star® Portfolio Manager using whole building energy and water data or estimates and the building characteristics
- Assign Freddie Mac permission to access the Energy Star® building profile

Consultant Qualifications

On-site work must be conducted by staff trained to identify and record needed energy and water information for related systems and equipment and to document building envelope information.

Energy analysis and report recommendations must be completed by energy engineers with 5 years of experience conducting energy audits and one of the following credentials:

- Building Performance Institute (BPI) building analyst certification for multifamily (MFBA)
- Association of Energy Engineers (AEE) Certified Energy Manager designation (CEM)

Seller/Service Responsibilities

The Seller/Service must provide the following information:

- Property name and address
- Occupancy
- On-site contact
- Property configuration (garden, high-rise, etc.)
- Gross floor area for all buildings
- Parking area (sf)
- Number of each bed/bath combination, average unit size, number of buildings/number of floors, number of phases, year built
- Type of heating and cooling systems in each building
- Number of pools, number of heated pools
- 12 months of records of water and energy consumption paid for by the property owner in CSV or Excel format
- 12 months of records of water and energy consumption in CSV or Excel format for all units if paid by the property owner and when available if paid for by the tenants
- Any previously completed property condition reports or energy studies